

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1. (Previously presented) A device for unfolding of folded boxes, comprising a magazine for receiving of flat folded-box sleeves, a removing device for individual removal of the folded-box sleeves from the magazine and for feeding the folded-box sleeves to an unfolding device wherein the folded-box sleeves are partially unfolded along a compressing section, the unfolding device including, after the compressing section, a chute for precise fitting receipt of the partially unfolded folded-box sleeves, an output device for removing the partially unfolded-box sleeves from the chute, an expansion chamber following the chute whereat the partially unfolded folded-box sleeves are fully unfolded, and

first and second devices provided at the expansion chamber and operated at the same speed to hold the fully unfolded box sleeves at diagonally opposite edges and to forward the fully unfolded box sleeves.

2. (Previously presented) The device according to Claim 1, wherein the removing device includes several arms having suction heads, and the arms are movable by a drive and a planetary gearing along a cycloidal path.

3. (Previously presented) The device according to Claim 1, wherein the compressing section is defined by a curved slide surface along which the folded-box sleeves are moved.

4. (Previously presented) The device according to Claim 1, wherein the output device includes lugs, each said

lug having a lug surface configured to align with a sidewall of the partially unfolded folded-box sleeves.

5. (Previously presented) The device according to Claim 4, wherein an angle (α) in a range of 20 to 25 degrees is provided between each of the lug surfaces and a normal perpendicular to a path of travel of the partially unfolded folded-box sleeves in the chute.

Claims 6-8. (Cancelled)

9. (Previously presented) A device for unfolding of folded-box sleeves, comprising:

- a magazine for receiving a plurality of stacked folded-box sleeves;

- a removing device having a plurality of arms with suction cups, said arms sequentially removing one of the folded-box sleeves from the magazine;

- a compressing section for compressing the folded-box sleeves when said removing device moves the folded-box sleeves therealong to only partially unfold the folded-box sleeves, the compressing section comprising a curved slide surface;

- a chute dimensioned to precisely receive the only partially unfolded box sleeves;

- an output device for removing the only partially unfolded box sleeves from the removing device and advancing the partially unfolded box sleeves from the chute;

- an expansion chamber following the chute for receiving the partially unfolded box sleeves from the chute; and

- first and second rotating devices for receiving the only partially unfolded box sleeves and fully unfolding the partially unfolded box sleeves, said first and second rotating devices forwarding the fully unfolded box sleeves from the expansion chamber.

10. (Previously presented) The device according to Claim 9, wherein the output device includes lugs having lug surfaces for contacting the partially unfolded box sleeves, the lugs defining an angle of 20 degrees to 25 degrees from normal to align with a sidewall of the partially unfolded folded-box sleeves.

11. (Currently amended) A method for unfolding folded boxes, comprising:

providing a plurality of stacked folded-box sleeves in a magazine;

sequentially removing one of the folded-box sleeves from a magazine with a removing device having a plurality of arms with suction cups;

advancing one of the folded-box sleeves supported by one of the plurality of the arms with the suction cups;

compressing the folded-box sleeve during advancement along a compressing section comprising a curved slide surface to only partially unfold the folded-box sleeve;

advancing the only partially unfolded folded-box sleeve with the one of the plurality of the arms into a chute;

removing the only partially unfolded folded-box sleeve from the one of the plurality of the arms using an output device without significant unfolding of the partially unfolded folded-box sleeve;

advancing the partially unfolded box sleeve from the chute without further significant unfolding ~~the box sleeve~~ into an expansion chamber following the chute using the output device; and

fully unfolding the partially unfolded box sleeve in the expansion chamber utilizing first and second rotating devices;

forwarding the fully unfolded box sleeve from the expansion chamber using the first and second rotating devices; and

repeating the above steps for additional folded-box sleeves by the removing the folded-box sleeves from the magazine sequentially utilizing the plurality of arms.

12. (Previously presented) The method according to Claim 11, wherein the step of compressing the folded-box sleeve during advancement along a compressing section comprises compressing the folded-box sleeve against a curved slide surface at an initial force and velocity enabling only the partial unfolding of the folded-box sleeve.

13. (Previously presented) The method according to Claim 11, wherein the step of advancing the partially unfolded box sleeve from the chute without further unfolding the partially unfolded box sleeve comprises contacting the partially unfolded box sleeves with lugs of the output device, the lugs defining an angle of 20 degrees to 25 degrees from normal to align with a wall of the partially unfolded folded-box sleeve.

14. (New) The device according to Claim 9, wherein the arms are movable through a drive and through a planetary gearing along a cycloidal path having points and curves, wherein the curved slide surface presses against an edge of the folded-box and partially unfolds a folded-box sleeve while the arm carrying the folded-box sleeve moves along a curve of the cycloidal path, and the curved slide surface is adapted to the curvature and distance of the cycloidal path in order to accomplish the compressing and partial unfolding of the folded-box sleeve.